

Title (en)
MULTI-SPLIT AIR CONDITIONING SYSTEM, AND REFRIGERANT FLOW CONTROL METHOD THEREFOR

Title (de)
MULTI-SPLIT-KLIMAANLAGE UND VERFAHREN ZUR REGELUNG DES KÜHLMITTELSTROMS DAFÜR

Title (fr)
SYSTÈME DE CLIMATISATION À UNITÉS MULTIPLES, ET PROCÉDÉ DE RÉGULATION D'ÉCOULEMENT DE FLUIDE FRIGORIGÈNE ASSOCIÉ

Publication
EP 4141339 A4 20231025 (EN)

Application
EP 21792867 A 20210205

Priority

- CN 202010323064 A 20200422
- CN 2021075562 W 20210205

Abstract (en)
[origin: EP4141339A1] Disclosed is a refrigerant flow control method for a multi-split air conditioning system, the method comprising: when a multi-split air conditioning system is started and operates in a heating mode, acquiring a refrigerant outlet side temperature of an indoor heat exchanger (EH_{i1}) of an indoor unit which is in a normal heating state, and a refrigerant outlet side temperature of an indoor heat exchanger (EH_{i2}) of an indoor unit which is in a standby/shutdown state; comparing the refrigerant outlet side temperature of the indoor heat exchanger (EH_{i1}) of the indoor unit in the normal heating state with the refrigerant outlet side temperature of the indoor heat exchanger (EH_{i2}) of the indoor unit in the standby/shutdown state; and selectively increasing or reducing the opening degree of a bypass expansion valve (XV_{i2}) of the indoor unit in the standby/shutdown state according to a comparison result. Further disclosed is a multi-split air conditioning system. The problems whereby when the multi-split air conditioning system is started and operates in a heating mode, the amount of refrigerant in an indoor unit in a normal heating state is insufficient, and the amount of noise of an indoor unit in the standby/shutdown state is large can be solved.

IPC 8 full level
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Citation (search report)

- [I] CN 102032648 A 20110427 - HISENSE SHANDONG AIRCO CO LTD
- [A] CN 110500702 A 20191126 - HISENSE SHANDONG AIRCO CO LTD
- [A] WO 2019104965 A1 20190606 - QINGDAO HAIER AIR CONDITIONING ELECTRONIC CO LTD [CN]
- See references of WO 2021212966A1

Designated contracting state (EPC)
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EP 4141339 A1 20230301; EP 4141339 A4 20231025; CN 113531856 A 20211022; WO 2021212966 A1 20211028

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